STATE OF CONNECTICUT
Regulation of Environmental Protection

Section 22a-174-36. Low Emission Vehicles

(a) Definitions.

For the purposes of this section:

"Air contaminant emission control system" means the equipment designed for installation on a motor vehicle or motor vehicle engine for the purpose of reducing the air contaminants emitted from the motor vehicle or motor vehicle engine, or a system or engine modification on a motor vehicle or motor vehicle engine which causes a reduction of air contaminants emitted from the motor vehicle or motor vehicle engine, including but not limited to exhaust control systems, fuel evaporation control systems, and crankcase ventilating systems.

"CARB" means the California Air Resources Board.

"Certified" means the finding by EPA or CARB that a motor vehicle, motor vehicle engine, or motor vehicle engine family, or air contaminant emission control system has satisfied the criteria adopted by EPA or CARB for the control of specified air contaminants from motor vehicles.

"Department" means the Department of Environmental Protection.

"Dual-fuel" means a motor vehicle that is engineered and designed to be capable of operating on a petroleum fuel and on another fuel which is stored separately on-board the vehicle.

"Emergency vehicle" means any publicly owned vehicle operated by a peace officer in performance of his or her duties, any authorized vehicle used for fighting fires or responding to emergency fire calls, any publicly owned authorized vehicle used by emergency medical technicians or paramedics, or used for towing or servicing other vehicles, or repairing damaged lighting or electrical equipment, or an ambulance.

"Emission control label" means the permanent stickers required by CARB and affixed to all 1998 and subsequent model year passenger cars and light duty trucks, certified for sale in California.

"EPA" means the United States Environmental Protection Agency.

"Executive Officer" means the Executive Officer of CARB.

"Fleet average emissions" means a motor vehicle manufacturer's average vehicle emissions of all non-methane organic gases from all vehicles which are subject to this section, sold in the State of Connecticut in any model year.

"Fuel-flexible" means a methanol-fueled motor vehicle that is engineered and designed to be operated using any gasoline-methanol fuel mixture or blend.

"Hybrid electric vehicle" or "HEV" means a motor vehicle which allows power to be delivered to the driver wheels solely by a battery powered electric motor but which also incorporates the use of a combustion engine to provide power to the battery, or any vehicle which allows power to be delivered to the driver wheels by either a combustion engine and/or by a battery powered electric motor.

"LDT" means light duty truck.

"Light duty truck" means any motor vehicle having a gross vehicle weight rating of 6000 pounds or less, which is designed primarily for purposes of transportation of property or is a derivative of such a vehicle, or is available with special features enabling off-street or off-highway operation and use.

"Loaded vehicle weight" means vehicle curb weight plus 300 pounds.

"LVW" means loaded vehicle weight.

"Model year" means a motor vehicle manufacturer's annual production period which includes January 1 of a calendar year or, if the manufacturer has no annual production period, the calendar year. In case of any vehicle manufactured in two or more stages, the time of manufacture shall be the date of completion of the chassis.

"New vehicle" means any passenger car or light duty truck with 7,500 miles or fewer on its odometer.

"Passenger car" means any motor vehicle designed primarily for transportation of persons and having a design capacity of twelve persons or less.

"PC" means passenger car.

"Vehicle" means a motor vehicle.

"Zero-emission vehicle" or (ZEV) means any vehicle which is certified by the Executive Officer to produce zero emissions of any criteria pollutants under any and all possible operational modes and conditions. Incorporation of a fuel fired heater shall not preclude a vehicle from being certified as a ZEV provided the fuel fired heater cannot be operated at ambient temperatures above 40 degrees Fahrenheit and the heater is demonstrated to have zero evaporative emissions under any and all possible operational modes and conditions.

(b) Applicability.

This section shall apply to all 1998 and subsequent model year passenger cars and light duty trucks sold, leased, offered for sale or lease, imported, delivered, purchased, rented, acquired or received, in the State of Connecticut except that this section shall not apply to those vehicles listed in subsection (d).

(c) Prohibitions.

(1) No person shall sell, import, deliver, purchase, lease, rent, acquire or receive a new vehicle in the State of Connecticut which is subject to this section unless such new vehicle:

(A) complies with the requirements of subsection (e);

(B) is approved by CARB for sale in the State of California; and

(C) has a valid Emission Control Label.

(d) Exemptions.

The following vehicles shall not be subject to this section:

(1) A vehicle transferred by inheritance;

(2) A vehicle transferred by decree of divorce, dissolution or legal separation entered by a court of competent jurisdiction;

(3) A vehicle purchased by a nonresident prior to establishing residency in the State of Connecticut;

(4) A vehicle sold for the purpose of being wrecked or dismantled;

(5) A vehicle sold directly from one dealer to another dealer;

(6) A vehicle sold for registration out of state;

(7) A vehicle sold designed exclusively for off-highway use;

(8) A vehicle which has been certified to standards promulgated pursuant to the authority contained in 42 U.S.C. 7521 and which is in the possession of a rental agency in Connecticut and is next rented with a final destination outside of Connecticut; or

(9) A vehicle which is an emergency vehicle.

(e) Emission Standards.

(1) Vehicle Emission Standards.

(A) The exhaust emissions from new 1998 ans subsequent model-year passenger cars and light-duty trucks which are subject to this section shall not exceed those set forth in Table 36-1:

Table 36-1
1998 and Subsequent Model-Year Passenger Car and Light-Duty Truck Exhaust Emissions Standards[3] [4] [5] [7]
(grams per mile)

Vehicle Type	Loaded Vehicle Weight (lbs)	Durability Vehicle Basis (mi)	Non-Methane Hydrocarbons[1]	Carbon Monoxide	Oxides of Nitrogen[2]
PC	All	50,000	0.25	3.4	0.4
PC	All	100,000	0.31	4.2	0.6[6]
Diesel PC (Option 2)	All	100,000	0.31	4.2	1.0
LDT	0 - 3750	50,000	0.25	3.4	0.4
LDT	0 - 3750	100,000	0.31	4.2	0.6[6]
Diesel LDT (Option 2)	0 - 3750	100,000	0.31	4.2	1.0
LDT	3751 - 5750	50,000	0.32	4.4	0.7
LDT	3751 - 5750	100,000	0.40	5.5	0.97[6]
Diesel LDT (Option 1)	3751 - 5750	100,000	0.40	5.5	1.5

(1) For methanol- or ethanol-fueled vehicles certifying to these standards, including fuel-flexible vehicles when certifying on methanol or ethanol, "Non-Methane Hydrocarbons" shall mean "Organic Material Non-Methane Hydrocarbon Equivalent" (or "OMMHCE").

(2) The maximum projected emissions of oxides of nitrogen measured on the federal Highway Fuel Economy Test (HWFET; 40 CFR Part 600 Subpart B) shall be not greater than 1.33 times the applicable passenger car standards and 2.00 times the applicable light-duty truck standards shown in the table. Both the projected emissions and the HWFET standard shall be rounded in accordance with ASTM E29-67 to the nearest 0.1 g/mi before being compared.

(3) Diesel passenger cars and light-duty trucks certifying to these standards, are subject to a particulate exhaust emission standard of 0.08 g/mi, determined on a 50,000 mile durability basis.

(4) For all vehicles, except those certifying to optional diesel standards, in-use compliance with exhaust emission standards shall be limited to vehicles with less than 75,000 miles.

(5) All passenger cars and light-duty trucks, except those diesel vehicles certifying to optional standards, are subject to non-methane hydrocarbon, carbon monoxide, and oxides of nitrogen standards determined on a 50,000 mile durability basis and non-methane hydrocarbon and carbon monoxide standards determined on an 100,000 mile durability basis.

(6) 100,000 mile NOx standards are applicable for 1998 and subsequent model-year vehicles.

(7) Each manufacturer shall also comply with the requirements specified in section 1960.1(g)(2).

(B) The exhaust emissions from new 1998 and subsequent model-year light-duty transitional low-emission vehicles, and ultra-low-emission vehicles which are subject to this section shall not exceed those set forth in Table 36-2:

Table 36-2
Exhaust Emission Standards for Transitional Low-Emission Vehicles, Low Emission Vehicles and Ultra-Low-Emission Vehicles in Passenger Car and Light-Duty Truck Vehicle Classes[5] [6] [7] [8] [9] (grams per mile or "g/mi")

Vehicle Type	Loaded Vehicle Weight (lbs)	Durability Vehicle Basis (mi)	Emission Category[1]	Vehicle Non-Methane Hydrocarbons[2],[3]	Carbon Monoxide	Oxides of Nitrogen[4]
PC and	All	50,000	TLEV	0.125	3.4	0.4
LDT	0 - 3750		LEV	0.075 (0.100)	3.4 (3.4)	0.2 (0.3)
			ULEV	0.040 (0.058)	1.7 (2.6)	0.2 (0.3)
		100,000	TLEV	0.156	4.2	0.6
			LEV	0.090	4.2	0.3
			ULEV	0.055	2.1	0.3
	3751 - 5750	50,000	TLEV	0.160	4.4	0.7
			LEV	0.100 (0.128)	4.4 (4.4)	0.4 (0.5)
			ULEV	0.050 (0.075)	2.2 (3.3)	0.4 (0.5)
		100,000	TLEV	0.200	5.5	0.9
			LEV	0.130	5.5	0.5
			ULEV	0.070	2.8	0.5

(1) "TLEV" means transitional low-emission vehicle.
"LEV" means low-emission vehicle.
"ULEV" means ultra-low-emissions vehicles.

(2) "Non-Methane Organic Gases" (or "NMOG") shall mean the total mass of oxygenated and non-oxygenated hydrocarbon emissions. To demonstrate compliance with an NMOG standard, NMOG emissions shall be measured in accordance with the "California Non-Methane Organic Gas Test Procedures" as adopted July 12, 1991 and last amended September 22, 1993, which is incorporated herein by reference. For TLEVs, LEVs, and ULEVs certified to operate exclusively on any fuel other than conventional gasoline, and for fuel-flexible and dual-fuel TLEVs, LEVs, and ULEVs when certifying on a fuel other than gasoline, manufacturers shall multiply NMOG exhaust certification levels by the applicable reactivity adjustment factor set forth in section 13 of the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" as incorporated by reference in section

1960.1(k). Title 13, California Code of Regulations, or established by the Executive Officer pursuant to Appendix VIII of the foregoing test procedures. In addition, natural gas vehicles certifying to TLEV, LEV, or ULEV standards shall calculate a reactivity-adjusted methane exhaust emission value by multiplying the methane exhaust certification level by the applicable methane reactivity adjustment factor set forth in section 13 of the above referenced test procedures. The product of the NMOG exhaust certification levels and the reactivity adjustment factor shall be compared to the exhaust NMOG mass emission standards established for the particular vehicle emission category to determine compliance. For natural gas vehicles, the reactivity-adjusted NMOG value shall be added to the reactivity-adjusted methane value and then compared to the exhaust NMOG mass emission standards established for the particular vehicle emission category to determine compliance.

(a) Each manufacturer shall certify PCs or LDTs to meet the exhaust mass emission standards for TLEVs, LEVs, ULEVs, or the exhaust emission standards of sections 1960.1 (e)(1), 1960.1 (f)(1), or 1960.1 (f)(2), Title 13, California Code of Regulations or as Zero-Emission Vehicles such that the manufacturer's fleet average NMOG values for California certified PCs and LDTs from 0-3750 lbs. "Loaded Vehicle Weight" (or "LVW"), and LDTs from 3751-5750 lbs. LVW produced and delivered for sale in California are less than or equal to the requirement for the Corresponding Model Year, Vehicle Type, and LVW Class in section 1960.1 (g)(2), Title 13, California Code of Regulations.

(3) Fuel-flexible and dual-fuel PCs and LDTs from 0-5750 lbs. LVW shall be certified to exhaust mass emission standards for NMOG established for the operation of the vehicle on any available fuel other than gasoline, and gasoline.

(a) For TLEVs, LEVs, and ULEVs, when certifying for operation on a fuel other than gasoline, manufacturers shall multiply exhaust NMOG certification levels by the applicable reactivity adjustment factor. In addition to multiplying the exhaust NMOG certification levels by the reactivity adjustment factor, natural gas vehicles shall multiply the exhaust methane certification level by the applicable methane reactivity adjustment factor and add that value to the reactivity-adjusted NMOG value. The exhaust NMOG certification levels for fuel-flexible or dual-fuel vehicles when certifying on gasoline shall not be multiplied by a reactivity adjustment factor.

(b) For PCs and LDTs from 0-3750 lbs LVW, the applicable exhaust mass emission standard for NMOG when certifying the vehicle for operation on gasoline shall be:

(i) For TLEVs, 0.25 g/mi and 0.31 g/mi for 50,000 and 100,000 miles, respectively.

(ii) For LEVs, 0.125 g/mi and 0.156 g/mi for 50,000 and 100,000 miles, respectively.

(iii) For ULEVs, 0.075 g/mi and 0.090 g/mi for 50,000 and 100,000 miles, respectively.

(c) For LDTs from 3751-5750 lbs. LVW, the applicable exhaust mass emission standard for NMOG when certifying the vehicle for operation on gasoline shall be:

(i) For TLEVs, 0.32 g/mi and 0.40 g/mi for 50,000 and 100,000 miles respectively.

(ii) For LEVs, 0.160 g/mi and 0.200 g/mi for 50,000 and 100,000 miles respectively.

(iii) For ULEVs, 0.100 g/mi and 0.130 g/mi for 50,000 and 100,000 miles respectively.

(4) The maximum projected emissions of "Oxides of Nitrogen" (or "NOx") measured on the federal Highway Fuel Economy Test (HWFET; 40 CFR 600 Subpart B) shall be not greater than 1.33 times the applicable light-duty vehicle standards shown in the table. Both the projected emissions and the HWFET standard shall be rounded in accordance with ASTM E29-67 to the nearest 0.1 g/mi before being compared.

(5) The standards in parentheses are intermediate in-use compliance standards for 50,000 miles. For PCs and LDTs from 0-5750 lbs. LVW, including fuel-flexible and dual-fuel vehicles when operating on any available fuel other than gasoline, intermediate in use compliance standards shall apply to LEVs and ULEVs for the 1998 model-year. In-use compliance with standards beyond 50,000 miles shall be waived fro the 1998 model-year for LEVs and ULEVs.

(a) For TLEVs, LEVs, and ULEVs designed to operate on any fuel other than conventional gasoline, including fuel-flexible and dual-fuel vehicles when operating on any fuel other than gasoline, exhaust NMOG mass emission results shall be multiplied by the applicable reactivity adjustment factor to determine compliance with intermediate in-use compliance standards for NMOG. In addition to multiplying the exhaust NMOG emission results by the applicable reactivity adjustment factor, natural gas vehicles shall multiply the methane emission results by the applicable methane reactivity adjustment factor and add that value to the reactivity-adjusted NMOG value. Exhaust NMOG mass emissions from fuel-flexible or dual-fuel vehicles when operating on gasoline shall not be multiplied by a reactivity adjustment factor.

(b) For fuel-flexible and dual-fuel PCs and LDTs from 0-3750 lbs. LVW intermediate in-use compliance standards for NMOG emissions at 50,000 miles, when the vehicle is operated on gasoline, shall be 0.188 g/mi and 0.100 g/mi for LEVs and ULEVs, respectively.

(c) For fuel-flexible and dual-fuel PCs and LDTs from 3751-5750 lbs. LVW intermediate in-use compliance standards for NMOG emissions at 50,000 miles, when the vehicle is operated on gasoline, shall be 0.238 g/mi and 0.128 g/mi for LEVs and ULEVs, respectively.

(6) Manufacturers of diesel vehicles shall also certify to particulate standards at 100,000 miles. For all PCs and LDTs from 0-5750 lbs. LVW, the particulate standard is 0.08 g/mi, 0.08 g/mi, and 0.04 g/mi for TLEVs, LEVs, and ULEVs, respectively.

(7) Manufacturers shall demonstrate compliance with the above standards for NMOG, CO, and NOx at 50 degrees F according to the procedure specified in section 11K of the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" as incorporated by reference in section 1960.1 (k), Title 13, California Code of Regulations. Hybrid electric, natural gas, and diesel-fueled vehicles shall be exempt from 50 degrees F test requirements.

(8) In-use compliance testing shall be limited to vehicles with fewer than 75,000 miles.

(9) Deterioration factors for hybrid electric vehicles shall be based on the emissions and mileage accumulation of the auxiliary power unit. For certification purposes only, Type A hybrid electric vehicles shall demonstrate compliance with 50,000 mile emission standards (using 50,000 mile deterioration factors), and demonstrating compliance with 100,000 mile emission standards shall not be required. For certification purposes only, Type B hybrid electric vehicles shall demonstrate compliance with 50,000 mile emission standards (using 50,000 mile deterioration factors) and 100,000 mile emission standards (using 75,000 mile deterioration factors). For certification purposes only, Type C hybrid electric vehicles shall demonstrate compliance with 50,000 mile emission standards (using 50,000 mile deterioration factors) and 100,000 mile emission standards (using 100,000 mile deterioration factors).

(2) Fleet Average Emission Standards.

The fleet average non-methane organic gas exhaust emission values from a manufacturer's sales of passenger cars and light-duty trucks which are subject to this section shall not exceed those set forth in Table 36-3:

Table 36-3
Fleet Average Non-Methane Organic Gas Exhaust Emission Requirements for Light-Duty Vehicle Weight Classes(6) (7) (8)
[grams per mile (or "g/mi")]

Vehicle Type	Loaded Vehicle Weight (lbs.)	Durability Vehicle Basis (mi)(6)	Model Year	Fleet Average Non-Methane Organic Gases(1) (2) (3) (4) (5)
PC and	All	50,000	1998	0.157
LDT	0 - 3750		1999	0.113
			2000	0.073
			2001	0.070
			2002	0.068
			2003 & subsequent	0.062
	3751 - 5750	50,000	1998	0.205
			1999	0.150
			2000	0.099
			2001	0.098
			2002	0.095
			2003 & subsequent	0.093

(1) "Non-Methane Organic Gases" (or "NMOG") shall mean the total mass of oxygenated and non-oxygenated hydrocarbon emissions.

(2) For the purpose of calculating fleet average NMOG values, a manufacturer may adjust the certification levels of hybrid electric vehicles (or "HEVs") based on the range of the HEV

without the use of the engine. For the purpose of calculating the adjusted NMOG emissions, the following definitions shall apply:

"Type A HEV" shall mean an HEV which achieves a minimum range of 60 miles over the All-Electric Range Test as defined in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-duty Vehicles" as incorporated by reference in section 1960.1(k). Title 13, California Code of Regulations.

"Type B HEV" shall mean an HEV which achieves a range of 40-59 miles over the All-Electric Range Test as defined in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" as incorporated by reference in section 1960.1(k). Title 13, California Code of Regulations.

"Type C HEV" shall mean an HEV which achieves a range of 0-39 miles over the All-Electric Range Test and all other HEVs excluding "Type A" and "Type B" as defined in "California Exhaust emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" as incorporated by reference in section 1960.1(k). Title 13, California Code of Regulations.

(a) For the purpose of calculating fleet average NMOG values, vehicles which have no tailpipe emissions but use fuel-fired heaters and which are not certified as ZEVs shall be treated as "Type A HEV ULEVs."

(3) Each Manufacturer's fleet average NMOG value for the total number of PCs and LDTs from 0-3750 lbs. "Loaded Vehicle Weight" (or "LVW") produced and delivered for sale in Connecticut shall be calculated in units of g/mi NMOG according to the following equation, where the term "Produced" means produced and delivered for sale in Connecticut as: {[(No. of vehicles Certified to the Exhaust Emission Standards section 1960.1(e)(1) and produced) x (0.39)] + [No. of vehicles Certified to the Exhaust Emission Standards in section 1960.1(f)(1) and Produced x (0.25)] + [(No. of Vehicles Certified to the Exhaust Emission Standards in section 1960.1(f)(2) and Produced) x (0.25)] + [(No. of Transitional Low-Emission Vehicles (or "TLEVs") excluding HEVs and Produced) x (0.125)] + [(No. of Low-Emission Vehicles (or "LEVs") excluding HEVs and Produced) x (0.075)] + [(No. of Ultra-Low Emission Vehicles (or "ULEVs") excluding HEVs and Produced) x (0.040)] + (HEV contribution factor)}/(Total No. of Vehicles Produced, Including Zero-Emission Vehicles and HEVs):

(a) "HEV contribution factor" shall mean the NMOG emission contribution of HEVs to the fleet average NMOG value. The HEV contribution factor shall be calculated in units of g/mi as follows, where the term "Produced" means produced and delivered for sale in Connecticut:

HEV contribution factor = {[No. of "Type A HEV" TLEVs Produced] x (0.100) + [No. of "Type B HEV" TLEVs Produced] x (0.113) + [No. of "Type C HEV" TLEVs Produced] x (0.125)} + {No of "Type A HEV" LEVs Produced] x (0.057) + [No. of "Type B HEV" LEVs Produced] x (0.066) + [No. of "Type C HEV" LEVs Produced] x (0.075)} + {[No. of "Type A HEV" ULEVs Produced] x (0.020) + [No. of "Type B HEV" ULEVs Produced] x (0.030) + [No. of "Type C HEV" ULEVs Produced} x (0.040)}.

(b) "Zero-Emission Vehicles" (or "ZEVs") classified as LDTs 3751-5750 lbs. LVW which have been counted toward the ZEV requirements for PCs and LDTs 0-3750 lbs. LVW as specified in note (B) shall be included in the equation of note (3).

(c) Beginning with the 1996 model year manufacturers that produce and deliver for sale in Connecticut PCs and LDTs 0-3750 lbs. LVW that are certified to federal Tier I exhaust emission standards in 40 CFR 86.094-8 and 86.094-9 shall add the following terms to the numerator of the fleet average NMOG equation in note (3) and calculate their fleet average NMOG values accordingly: [(No. of Vehicles Certified to federal Tier I exhaust emission standards and Produced) x (0.25)].

(4) Manufacturers that certify LDTs from 3751-5750 lbs. LVW shall calculate a fleet average NMOG value in units of g/mi NMOG according to the following equation, where the term "Produced" means Produced and delivered for sale in Connecticut: {[(No. of Vehicles Certified to the Exhaust Emission Standards in section 1960.1(e)(1), and Produced x (0.50)] + [(No. of Vehicles Certified to the Phase-In Exhaust Emission Standards in section 1960.1(f)(1), and Produced x (0.32)] + [(No. of Vehicles Certified to the Exhaust Emission Standards in section 1960.1(f)(2), and Produced x (0.32)] + [(No. of TLEVs Produced excluding HEVs) x (0.160)] + [(No. of LEVs produced excluding HEVs) x (0.100)] + [(No. of ULEVs Produced excluding HEVs) x (0.050)] + (HEV contribution factor)}/(Total No. of Vehicles Produced, Including ZEVs and HEVs).

(a) "HEV contribution factor" shall mean the NMOG emission contribution of HEVs to the fleet average NMOG value. The HEV contribution factor shall be calculated in units of g/mi as follows, where the term "Produced" means produced and delivered for sale in Connecticut:

HEV contribution factor = {[No. of "Type A HEV" TLEVs Produced] x (0.130) + [No. of "Type B HEV" TLEVs Produced] x (0.145) + [No. of "Type C HEV" TLEVs Produced] x (0.160)} + {No. of "Type A HEV" LEVs Produced] x (0.075) + [No. of "Type B HEV" LEVs Produced] x (0.087) + [No. of "Type C HEV" LEVs Produced] x (0.100)} + {[No. of "Type A HEV" ULEVs Produced] x (0.025) + [No. of "Type B HEV" ULEVs Produced] x (0.037) + [No. of "Type C HEV" ULEVs Produced} x (0.050)}.

(b) Only ZEVs which have been certified as LDTs 3751-5750 lbs. LVW and which have not been counted toward the ZEV requirements for PCs and LDTs 0-3750 lbs. LVW as specified in note (8) shall be included in the equation of note (4).

(c) Beginning with the 1996 model year, manufacturers that produce and deliver for sale in Connecticut LDTs 3751-5750 lbs. LVW that are certified to the Tier I exhaust emission standards in 40 CFR 86.094-9 shall add the following term to the numerator of the fleet average NMOG equation in note (4) and calculate their fleet average NMOG values accordingly: {(No. of Vehicles Certified to federal Tier I exhaust emission standards and Produced and Delivered for Sale in Connecticut) x (0.32)].

(5) As used in this subsection, the term "small volume manufacturer" shall mean any vehicle manufacturer with California sales less than or equal to 3000 PCs, LDTs and MDVs per model year based on the average number of vehicles sold by the manufacturer each model year from 1989 to 1991, except as noted below. For manufacturers certifying for the first time in California model-year- sales shall be based on projected California sales. In 2000 and

subsequent model years small volume manufacturers shall comply with the fleet average NMOG requirements set forth below.

(a) Prior to the model year 2000, compliance with the specified fleet average NMOG requirements shall be waived.

(b) In 2000 and subsequent model years, small volume manufacturers shall not exceed a fleet average NMOG value of 0.075 g/mi for PCs and LDTs from 0-3750 lbs. LVW calculated in accordance with note (3).

(c) In 2000 and subsequent model years, small volume manufacturers shall not exceed a fleet average NMOG value of 0.100 g/mi for LDTs from 3751-5750 lbs. LVW calculated in accordance with note (3).

(d) If a manufacturer's average California sales exceeds 3000 units of new PCs, LDTs, and MDVs, based on the average number of vehicles sold for any three consecutive model years, the manufacturer shall no longer be treated as a small volume manufacturer and shall comply with the fleet average requirements applicable for larger manufacturers as specified in section 1960.1(g)(2) beginning with the fourth model year after the last of the three consecutive model years.

(e) If a manufacturer's average California sales falls below 3000 units of new PCs, LDTs, and MDVs based on the average number of vehicles sold for any three consecutive model years, the manufacturer shall be treated as a small volume manufacturer and shall be subject to requirements for small volume manufacturers as specified in section 1960.1(g)(2) beginning with the next model year.

(6) In 1992 and subsequent model years, manufacturers that achieve fleet average NMOG values lower than the fleet average NMOG requirement for the corresponding model year shall receive credits in units of g/mi NMOG determined as {[(Fleet Average NMOG Requirement) - (Manufacturers Fleet Average NMOG Value)] x (Total No. of Vehicles Produced and Delivered for Sale in Connecticut, Including ZEVs and HEVs)}.

(a) Manufacturers with fleet average NMOG values greater than the fleet average requirement for the corresponding model year shall receive debits in units of g/mi NMOG equal to the amount of negative credits determined by the aforementioned equation. For any given model year, the total g/mi NMOG credits or debits earned for PCs and LDTs 0-3750 lbs. LVW and for LDTs 3751-5750 lbs. LVW shall be summed together. The resulting amount shall constitute the g/mi NMOG credits for debits accrued for the model year.

(b) For the 1994 through 1997 model years manufacturers shall equalize emission debits within three model years and prior to the end of the 1998 model year by earning g/mi NMOG emission credits in an amount equal to their g/mi NMOG debits or by submitting a commensurate amount of g/mi NMOG credits to the Executive Officer that were earned previously or acquired from another manufacturer. For 1998 and subsequent model years manufacturers shall equalize emission debits by the end of the following model year. If emission debits are not equalized within the specified time period, the manufacturer shall be subject to the Health and Safety Code section 43211 civil penalty applicable to a manufacturer which sells a new motor vehicle that does not meet the applicable emission standards adopted by the state board. The cause of action shall be deemed to accrue when the emission debits are not equalized by the end of the specified time period. For the

purpose of Health and Safety Code section 43211, the number of vehicles not meeting the state board's emission standards shall be determined by dividing the total amount of g/mi NMOG emission debits for the model year by the g/mi NMOG fleet average requirement for PCs and LDTs 0-3750 lbs. LVW applicable for the model year in which the debits were first incurred.

(c) The g/mi NMOG emission credits not used to equalize the previous model-year's debit, shall be discounted by 50% at the beginning of the second model year after being earned, discounted to 25% of its original value if not used by the beginning of the third year after being earned, and will have no value if not used by the beginning of the fourth model year after being earned.

(7) Manufacturers that produce and deliver for sale in Connecticut vehicles certified to the phase-in exhaust emission standards in section 1960.1(f)(1), or vehicles certified to the exhaust emission standards in section 1960.1(f)(2) or 1960.1(g)(1) and/or ZEVs, in the 1992 and 1993 model years, shall receive emission credits as determined by the equations in footnotes (3), (4), and (6).

(a) For PCs and LDTs from 0-3750 lbs. LVW the fleet average NMOG requirement for calculating a manufacturer's emission credits shall be 0.390 and 0.334 g/mi NMOG for vehicles certified for the 1992 and 1993 model years, respectively.

(b) For LDTs from 3751-5750 lbs. LVW the fleet average NMOG requirement for calculating a manufacturer's emission credits shall be 0.500 and 0.428 g/mi NMOG for vehicles certified for the 1992 and 1993 model years, respectively.

(c) Emission credits earned prior to the 1994 model year shall be considered as earned in the 1994 model year and discounted in accordance with the schedule specified in footnote (6).

(f) Reporting Requirements.

(1) Delivery Reporting Requirements.

For the purposes of determining compliance with the requirements of this section, commencing with the 1998 model year, each manufacturer shall submit annually, to the Department, within 60 days subsequent to the end of each model year, a report documenting total deliveries for sale of vehicles in each engine family over that model year in the State of Connecticut.

(2) Fleet Average Emissions Reporting Requirements.

(A) For the purposes of determining compliance with the requirements of subdivision (e)(2), commencing with the 1998 model year, each manufacturer shall submit annually to the Department, within 60 days subsequent to the end of each model year, a report which demonstrates that

such manufacturer has met the fleet average emissions requirements for its fleet delivered for sale in Connecticut.

(B) Prior to the commencement of each model year, commencing with the 1998 model year, each manufacturer shall submit, to the Department, a projection of the fleet average emissions for vehicles delivered for sale in Connecticut during such model year.

(g) Alternative Means of Compliance via the National Low Emission Vehicle (LEV) program.

(1) The provisions of subsections (b) through (f) of this section shall not apply to any 1999 and subsequent model year passenger car or light duty truck sold, leased, offered for sale or lease, imported, delivered, purchased, rented, acquired or received in the State of Connecticut for the time period specified in subdivision (3) of this subsection if a covered manufacturer, as defined at 40 CFR 86.1702, of such vehicle complies with a National LEV program adopted by the Administrator pursuant to 42 U.S.C. 7521 (a)(1) and 42 U.S.C. 7601 (a) in accordance with the provisions set forth in 40 CFR Parts 9, 85 and 86 and 63 Federal Register 926 (January 7, 1998).

(2) For the time period specified in subdivision (3) of the subsection, manufacturers may comply with National LEV or equally stringent mandatory federal standards in lieu of compliance with any program, including any mandates for sales of zero emissions vehicles, adopted by the Commissioner pursuant to the authority provided in section 177 of the Clean Air Act, 42 U.S.C. 7507, applicable to passenger cars, light-duty trucks up through 6,000 pounds GVWR, and medium-duty vehicles from 6,001 to 14,000 pounds GVWR if designed to operate on gasoline, as these categories of motor vehicles are defined in the California Code of Regulations, Title 13, Division 3, Chapter 1, Article 1, Section 1900.

(3) The State of Connecticut, as set forth by the provisions of this subsection, shall participate in the National LEV program from model year 1999, inclusive, until model year 2006, except as expressly provided in 40 CFR 86.1707. If, by December 15, 2000, the Administrator does not take final action to adopt standards at least as stringent as the National LEV standards provided in 40 CFR 86 subpart R that apply to new motor vehicles in model years 2004, 2005 or 2006, participation in national LEV shall extent only until model year 2004, except as expressly provided in 40 CFR 1707.

(4) If a covered manufacturer, as defined at 40 CFR 86.1702, opts out of the National LEV program in accordance with the provisions of 40 CFR 86.1707, the transition from requirements imposed by the National LEV programs to the requirements

imposed by the provisions of subsections (b) through (f) of this section or any program adopted by the Commissioner pursuant to the authority provided in section 177 of the Clean Air Act, 42 U.S.C. 7507, applicable to passenger cars, light-duty trucks up through 6,000 pounds GVWR, and medium-duty vehicles from 6,001 to 14,000 pounds GVWR if designed to operate on gasoline, as these categories of motor vehicles are defined in the California Code of Regulations, Title 13, Division 3, Chapter 1, Article 1, Section 1900, will proceed in accordance with 40 CFR 86.1707.

(5) Nothing in this subsection shall preclude the Commissioner from adopting and implementing requirements under section 177 of the Clean Air Act, 42 U.S.C. 7507, for heavy duty trucks and engines and diesel-powered vehicles between 6,001 and 14,000 pounds GVWR.